

## **CLAIMS**

We claim:

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1. A high voltage motor monitoring system comprising:

a motor control enclosure having high voltage lines extending thereunto from a high voltage source and extending therefrom the power to a high voltage motor;

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a current transformer located on each high voltage line in said motor control enclosure for measuring the current in each high voltage line and producing a low voltage signal proportional to the measured current;

an E-plug module located inside said motor control enclosure connected to each of said current transformers for processing said low voltage signals there from for use by an externally located motor monitoring system ; and

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a quick connect means mounted on an outside surface of said motor control enclosure having connect to said E-plug module inside said enclosure and to a motor monitoring system outside said enclosure.

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2. A system as set forth in claim 1 wherein said current transformers are donut shaped and have said high voltage lines extending there through.

3. A system as set forth in claim 2 wherein said motor control enclosure has a door thereto and said quick connect means are mounted thereto.

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4. A system as set forth in claim 3 wherein said quick connect means includes an RJ-45 plug mounted to said door with a quick connect cable extending from said E-plug module thereto inside said enclosure and a quick connect cable connected thereto outside said enclosure for connection to a motor signature monitoring system.

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5, A system as set forth in claim 4 wherein said motor signature monitoring system is an EMPATH type system.

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